

REMARKS

This paper is responsive to the Office Action mailed November 20, 2006. Claims 6-23 were pending in this application before submission of this paper. Claims 6, 21 and 23 have been amended. Claims 17 and 22 are canceled. Claims 6-16, 18-21 and 23 are currently pending in this application. Support for all amended claims can be found in the specification, and no new matter has been added by these amendments. Reconsideration of the claims in view of the amendments and the following remarks is respectfully requested.

Amendment to the Specification

Applicants have amended the specification to clarify the priority statement. Specifically, Applicants have amended the specification to more clearly identify the claim for priority to PCT Application No. PCT/US02/26292, which claims priority to U.S. Provisional Application No. 60/312,471.

Objection to the Declaration

The Office Action states that the declaration is defective because a non-initialed alteration was made to the title. Applicants acknowledge that a defective declaration was submitted on August 23, 2004 in response to a Notice to File Missing Parts. However, a subsequent declaration in compliance with 37 CFR 1.67(a) was submitted on August 18, 2005 with a Petition to Correct Inventorship.

Claim Rejections under 35 U.S.C. §102

Claims 6-23 are rejected under 35 U.S.C. §102(a) as being anticipated by "Architecture and Performance Potential of STICS - SCSI-To-IP Cache Storage" (hereinafter "He") which was authored by Applicants, Xubin He and Quin Yang. Applicants respectfully disagree.

First, the Examiner incorrectly cites to 35 U.S.C. §102(a) as the basis of the rejection. The cited statutory provision states that a "person shall be entitled to a patent unless the invention was known or used by others in this country, or patented or described in a printed

publication in this or a foreign country, before the invention thereof by the applicant for patent." Because Applicants are the authors of the *He* reference, *He* does not qualify as prior art under 35 U.S.C. §102(a).

Second, it has not been shown that *He* would qualify as prior art under any section of 35 U.S.C. §102. In particular, there is no indication that *He* was published one year prior to the earliest priority date of the present invention.

In view of the foregoing, withdrawal of the rejection of claims 6-23 under 35 U.S.C. §102 is respectfully requested.

Claim Rejections under 35 U.S.C. §103

Claims 6-10, 16 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over "DCD-Disk Caching Disk: A New Approach to Boosting I/O Performance" by Yiming Hu and Qing Yang (hereinafter "*DCD*") in view of "VISA: Netstation's Virtual Internet SCSI Adapter" by Rodney Van Meter, Gregory G. Finn and Steve Hotz (hereinafter "*VISA*"). Without conceding the merits of the rejection, Applicants respectfully submit that the amended claims overcome this rejection.

DCD teaches a disk hierarchy consists of three levels: a RAM buffer and two physical disks (a cache disk and a data disk drive). Data does not wait in the buffer until the buffer is full. Rather, data is written into the cache-disk whenever the cache-disk is available. The cache disk does not become idle as long as write requests are received or are in the buffer queue.

VISA teaches a virtual internet SCSI adapter which makes Internet-attached peripherals appear as if they are attached to a local SCSI bus. An SCSI disk device driver transmits requests to the virtual internet SCSI adapter and to a SCSI bus adapter driver. The virtual internet SCSI adapter uses the Internet Protocol to send packets over any supported network medium.

Claim 6, as amended, recites in part, "the log disk and the buffer are configured as a two-level hierarchical cache such that least recently used data in the buffer is transferred to the

log disk before more recently accessed data is stored in the buffer." In one feature, "the data [is] transferred from the buffer to the log disk when one of: the amount of data in the buffer exceeds a threshold value or the log disk is idle." In another feature, "in the event that the amount of data in the log disk exceeds the threshold value, a portion of the data is transferred from the log disk to a remote cache storage system coupled to the switched packet network via the network interface."

Neither *DCD*, *VISA* nor any of the other cited references, alone or in combination, teach all of the features recited in independent claim 6. Specifically, neither *DCD* nor *VISA* teach "in the event that the amount of data in the log disk exceeds the threshold value, a portion of the data is transferred from the log disk to a remote cache storage system coupled to the switched packet network via the network interface." For at least this reason, claim 6 is allowable over the cited art, as are claims 7-10 and 16, which depend from claim 6.

Independent claim 21, as amended, recites features that are similar to the features recited in amended claim 6. As discussed above with reference to claim 6, the cited art does not teach these features. Thus, claim 21 is also allowable over the cited art for at least the same reasons.

Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 6-10, 16 and 21.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Application No. 10/780,108
QING YANG
Reply to Office Action of November 20, 2006

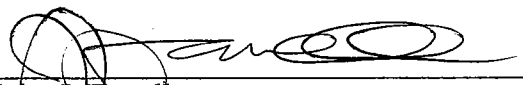
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If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 206-467-9600.

Respectfully submitted,

Date

4/4/07


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